



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

EPA Region 5 Records Ctr.



313374

NOV 20 2008

REPLY TO THE ATTENTION OF.

MEMORANDUM

SUBJECT: **ACTION MEMORANDUM #2** - Request for a Ceiling Increase for the Removal Action at the Texas Township Pole-barn Drum Site, Kalamazoo, Michigan (Site ID #B5PY)

FROM: Partap C. Lall, *On Site* Coordinator
Emergency Response Branch 2 – Oil Planning and Response Section

TO: Richard C. Karl, Director
Superfund Division

THRU: Linda Nachowicz, Chief *L. Nachowicz*
Emergency Response Branch 2

I. PURPOSE

The purpose of this memorandum is to request and document your approval for a ceiling increase to expend up to an additional \$294,000 to mitigate threats to public health, welfare, and the environment at the Texas Township drum fire site (“the Site”) located in Texas Township, Kalamazoo, Michigan. If approved, this increase will bring the total approved ceiling for the Site to \$939,600. The expanded removal action is necessary to mitigate the immediate threat to human health and the environment posed by numerous containers of high hazard chemicals, biohazard waste, numerous preserved and decomposing biological species, asbestos containing materials, spilled mercury compounds and metallic mercury, compressed gas cylinders and a large number of drums containing radiological materials. The majority of drums at the Site contained anywhere from 150 to 500 small bottles of chemicals, in many cases with crystals growing around the caps due to the age of these containers. Since a number of these drums were damaged in the fire, a sizable amount of hazardous waste debris with mixed hazardous constituents has complicated the disposal process and added to the cost. The original action memorandum was approved by Superfund Division Director Richard C. Karl on October 9, 2008.

Under the authority of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 Code of Federal Regulations (CFR) 300.415 (b)(2), the additional removal action ceiling proposed herein will address immediate threats to public health, welfare, and the environment posed by the Site by disposing of all additional chemical, biological and radiological waste streams generated during this emergency removal. The project will require an additional two weeks to complete.

The Texas township pole-barn fire site is not on the National Priorities List (NPL).

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID#

A. Physical Location and Site Characteristics

The site is located at West O Avenue, Kalamazoo, Michigan 49009 on a 33 acre parcel with a house in the front part of the property and the pole-barn where drums were stored about 300 yards behind the house in a wooded area. After the fire, the owner moved about 50 drums into a freshly dug pit and approximately 70 drums to a staging area designed by clearing some trees. Both the pit and staging areas are within 100 yards of the pole-barn. The Site is in a rural residential area. The closest house to the locations of the drums is approximately 300 yards. Access to the site is unrestricted. Wildlife is plentiful in the area.

The geographical coordinates for the site are latitude 42.31538 N, longitude -85.70767.

According to the Region 5 Superfund Environmental Justice Analysis (Attachment 4), in Michigan, the low income percentage is 29% and the minority percentage is 21%. To meet the environmental Justice (EJ) criteria, the area within one mile of the Site must have a population that is twice the state low income percentage and/or twice the state minority percentage. That is, the area must be at least 58% low income and/or 42% minority. As determined by the Landview 3 analysis, in the area of the Site, the low income percentage is 10% and the minority percentage is 4%. Therefore, this site does not meet the Region's EJ criteria based on demographics as identified in "Region 5 Interim Guidelines for Identifying and Addressing a Potential EJ Case, June 1998."

B. Site Background and Site Evaluation

On August 19, 2008, a fire broke out in an out building (pole-barn) at West Avenue O in Kalamazoo, Texas Township, Michigan. The property owner declined assistance by the Fire Department and worked to attempt to extinguish the fire by himself. County, local and state authorities obtained a warrant against the property owner and on August 26, 2008 conducted an assessment of site conditions and performed air monitoring activities along the perimeter of the Site and around the out building. Upon inspection of the Site, an estimated 500 55-gallon drums containing various hazardous materials and biological wastes were present in three (3) locations on the property, including the pole barn, staged along a trail on the property, and placed in a recently excavated pit. On August 27, 2008, investigators from the EPA Criminal Investigation Division (CID) and the MDEQ Office of Criminal Investigation (OCI) started an investigation, with the help of MDEQ contractors Weston Solutions and Young Environmental to assist with examination and sampling of containers. On August 31, 2008, CID turned the site over to the EPA Superfund Division, Emergency Response Branch for an emergency removal action. Site security was immediately established. The drums were charred and some contained incompatible

materials which could have reacted when the drums were moved. The Site posed a threat to the nearby human population and animals due to the dangerous nature of materials found in drums and the unstable conditions of drums. The adjacent area is used as rural residential property.

III. THREATS TO PUBLIC HEALTH, WELFARE, OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

The conditions at the Site present a release or a threat of release of CERCLA hazardous substances, and meet the criteria for an emergency removal action provided for in the National Contingency Plan (NCP), 40 CFR § 300.415 (b)(2). These criteria include the following:

- i. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants:

The drums containing a variety of hazardous and acutely hazardous chemicals are present in an open, unrestricted wooded area. Many of the containers suffered fire damage, releasing part of their contents. Metallic mercury has been found on the floor of and soil surrounding the pole-barn, as well as in a dumpster left on site by the owner. Mercury vapor, if inhaled, can cause serious nerve and neurological damage, resulting in death. Twenty-five of the drums have been determined to contain radiological materials. These materials contain sources of alpha and gamma radiation. Alpha radiation is deadly if inhaled. Gamma radiation is high energy radiation that can travel long distances and burns everything in its path. If not secured and properly disposed of, these radioactive sources can cause a great deal of damage to human and animal life.

- ii. Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers that pose a threat of release:

There are approximately 500 drums full of containers of flammable materials, corrosives, oxidizers, explosive materials, shock sensitive materials, herbicides, pesticides, radioactive materials, metallic mercury, and other acutely toxic chemicals in various stages of deterioration. Picric acid and some of the peroxides on site could explode if disturbed by a person or animal walking in the woods. Flammable materials, pesticides and herbicides could release a toxic cloud if they catch on fire. Water reactive chemicals on site, like sodium metal, could explode just by coming in contact with moisture.

- iii The availability of other federal or state response mechanisms to respond to the release:

In an email dated August 26, 2008, MDEQ requested assistance from U.S. EPA in conducting an investigation and emergency removal at this site. Neither MDEQ nor any other local governmental unit has adequate resources to conduct a removal action of this magnitude.

IV. ENDANGERMENT DETERMINATION

Given the Site conditions, the nature of the suspected hazardous substances on-site, and the potential exposure pathways described in Section II and III above, actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment.

V. PROPOSED ACTIONS & ESTIMATED COSTS

A. Proposed Action Description

The OSC proposes that the following emergency removal actions be taken to mitigate threats posed by the presence of hazardous substances at the Site:

- 1) Develop and implement a site health and safety plan;
- 2) Provide site security measures and contain the hazardous substances on site;
- 3) Secure, stage, sample and characterize all wastes;
- 4) Properly lab pack small containers of chemicals in compatible groups.
- 5) Characterize, package and dispose of radioactive waste.
- 6) Remove all metallic mercury and compressed gas cylinders.
- 7) Transport and dispose of all hazardous wastes, pollutants and contaminants at an EPA approved facility in accordance with EPA off-site rule 40 CFR 300.440;
- 8) Decontaminate affected areas and conduct confirmatory sampling to establish completion of the removal action.

The removal action will be conducted in a manner not inconsistent with the National Contingency Plan (NCP). The OSC has initiated planning for provisions of post-removal site control consistent with the provisions of Section 300.415(l) of the NCP. Elimination of all surface threats is, however, expected to minimize the need for post-removal site control. The removal action will be conducted in a manner to obtain and preserve information and evidence which may be of use in a civil or criminal investigation of the site. Actions are being coordinated with MDEQ to facilitate an orderly transition.

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants, or contaminants at the Site which may pose an imminent and

substantial endangerment to public health and safety and the environment. These response actions do not impose a burden on the affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

Removal activities will require 15 additional on-site working days to complete.

B. Removal Project Ceiling Estimate

<i>Regional Removal Allowance Costs:</i>	<i>Current:</i>	<i>Increase:</i>	<i>Total:</i>
Total Cleanup Contractor Costs: (This cost category includes estimates for ERRS and subcontractors, Notices to Proceed, and Interagency Agreements with Other Federal Agencies. Includes a 15% contingency)	\$458,000	\$220,000	\$678,000
<i>Other Extramural Costs Not Funded from the Regional Allowance:</i>			
Total START, including multiplier costs:	\$80,000	\$25,000	\$105,000
Total USCG Strike Team:	\$0	\$0	\$0
Extramural Subtotal:	\$538,000	\$245,000	\$783,000
Extramural Contingency (20%)	\$107,600	\$49,000	\$156,600
TOTAL REMOVAL PROJECT CEILING:	\$645,600	\$294,000	\$939,600

C. Applicable or Relevant and Appropriate Requirements

All applicable, relevant, and appropriate requirements (ARARs) will be complied with to the extent practicable considering the exigencies of the situation. On September 25, 2008 a letter was sent to Mr. Mark Ducharme of MDEQ requesting that the State identify state ARARs.

VI. EXPECTED CHANGE IN THE SITUATIONS SHOULD ACTION BE DELAYED OR NOT TAKEN

Given the site conditions, the nature of the hazardous substances documented on-site, and the potential exposure pathways to nearby populations described in Sections II and III above, an actual or threatened release of hazardous substances from the Site, if not addressed by implementing the response actions selected in this Action Memorandum, would have presented an imminent and substantial endangerment to public health, welfare, or the environment.

VII. OUTSTANDING POLICY ISSUES

None.

VIII. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this site is contained in the Enforcement Confidential Addendum.

The total EPA costs for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be \$1,555,702 ¹

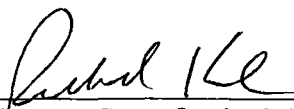
$$(939,600 + \$25,000) + (62.91\% \times \$939,600) = \$1,555,702$$

IX. RECOMMENDATION

This decision document represents the selected removal action for the Texas Township Pole-barn Fire Emergency Removal Site in Kalamazoo, Michigan developed in accordance with CERCLA as amended, and not inconsistent with the NCP. This decision was based on the administrative record for the site. Conditions at the Site meet the NCP section 300.415 (b) (2) criteria for an emergency removal and I recommend your approval of the removal action.

The total additional removal action project ceiling if approved will be \$294,000. Of this, an estimated \$269,000 comes from the regional removal allowance. The total ceiling including prior removal will be \$939,600. You may indicate your decision by signing below.

APPROVE: _____


Director, Superfund Division

DATE: 11-20-06

DISAPPROVE: _____

Director, Superfund Division

DATE: _____

¹ Direct Costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site-specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States' right to cost recovery.

Enforcement addendum

Attachments:

- 1) Detailed Cleanup Contractor Costs
- 2) Administrative Record Index
- 3) Independent Government Cost Estimate
- 4) Region 5 E.J. Analysis

cc: D. Chung, U.S. EPA, 5203-G
M. Chezik, U.S. DOI, W/O Enforcement Addendum
S. Chester, MDEQ W/O Enforcement Addendum
M. Cox, Michigan Attorney General W/O Enforcement addendum

BCC PAGE

(REDACTED 1 PAGE)

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

ENFORCEMENT ADDENDUM

**TEXAS TOWNSHIP POLE-BARN FIRE EMERGENCY SITE
KALAMAZOO, MICHIGAN**

SEPTEMBER 2008

(REDACTED 1 PAGE)

**ENFORCEMENT CONFIDENTIAL
NOT SUBJECT TO DISCOVERY**

ATTACHMENT 1

DETAILED ADDITIONAL CLEANUP CONTRACTOR COST ESTIMATE

Texas Township Pole-barn fire Emergency Removal Site

Kalamazoo, Kalamazoo County, Michigan

November 2008

Estimated Cleanup Contractor costs are as follows:

Subcontractors	\$191,000
(Including lab pack subs and disposal)	
15 % contingency	\$28,650
TOTAL	\$219,650 (say \$220,000)



ATTACHMENT 2

U.S. ENVIRONMENTAL PROTECTION AGENCY REMOVAL ACTION

ADMINISTRATIVE RECORD FOR TEXAS TOWNSHIP POLE-BARN FIRE SITE KALAMAZOO, KALAMAZOO COUNTY, MICHIGAN

ORIGINAL
OCTOBER 9, 2008

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
1	08/26/08	O'Donnell, D., MDEQ	Kimble, J., U.S. EPA	Electronic Transmission re: the Texas Township Pole-barn Fire Site	1
2	09/01/08	Lall, P., U.S. EPA	Distribution List	Pollution Report (POLREP 1) Initial for the Texas Town- ship Pole-barn Fire Site	2
3	09/16/08	Lall, P., U.S. EPA	Distribution List	Pollution Report (POLREP 2) for the Texas Township Pole-barn Fire Site	2
4	09/25/08	Lall, P., U.S. EPA	Karl, R., U.S. EPA	Electronic Transmission re: U.S. EPA's Request that MDEQ Identify all ARARs for the Texas Township Pole-barn Fire Site	1
5	10/09/08	Lall, P., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum: Request for an Emergency Removal Action at the Texas Township Pole-barn Fire Site (PORTIONS OF THIS DOCUMENT HAVE BEEN REDACTED, SDMS ID: 299973)	13

UPDATE #1 NOVEMBER 2008

1	00/00/00	Lall, P., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum #2: Request for a Ceiling Increase for the Removal Action at the Texas Town- ship Pole-barn Drum Site (PENDING)
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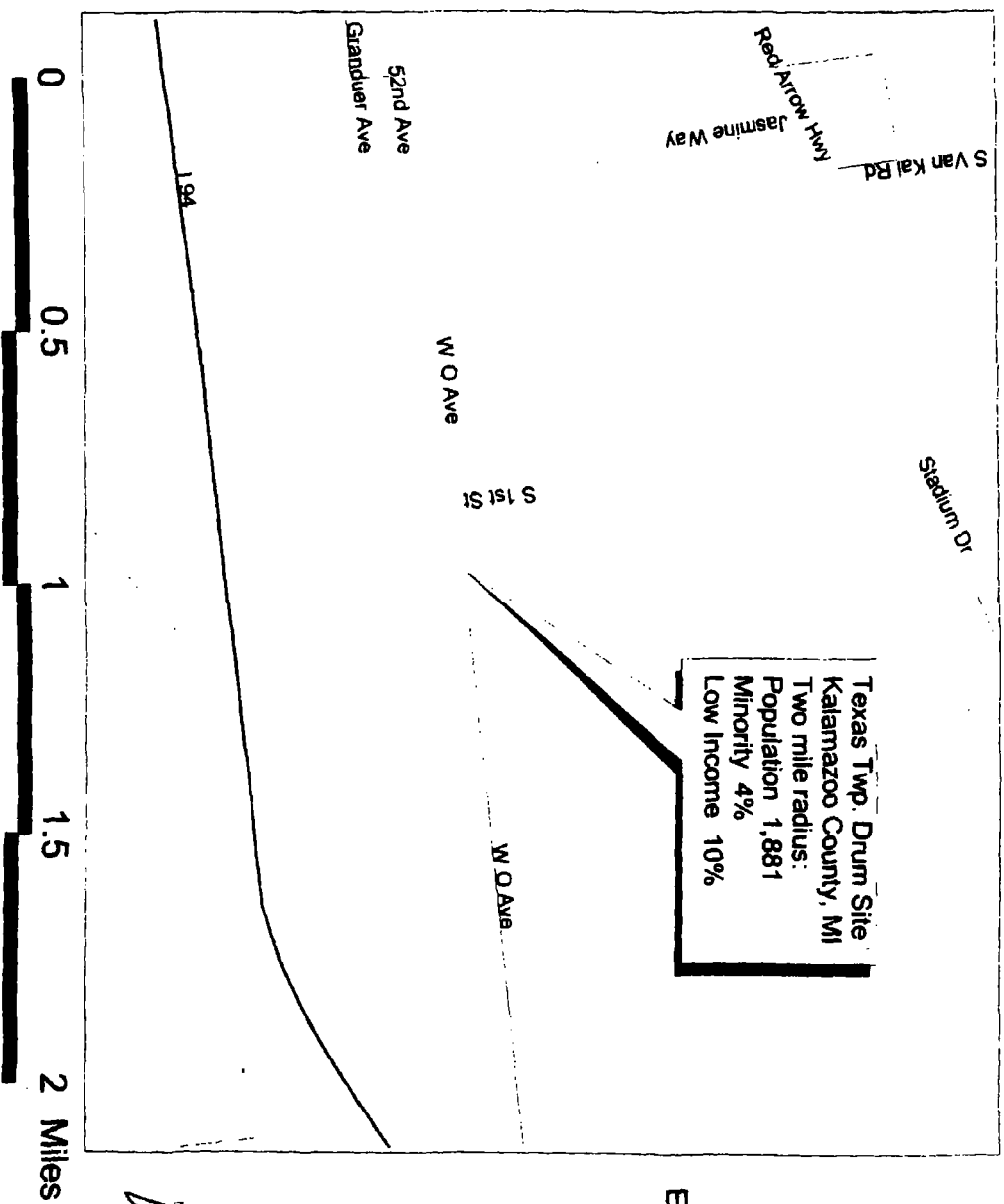
ATTACHMENT 3

Texas Township Pole-barn Fire Emergency Removal Site
Ceiling Increase Independent Government Cost Estimate
Kalamazoo, Kalamazoo County, MI
November 2008

Subcontractor costs	\$220,000
(Transportation & Disposal of lab-packed drums, cubic-yard boxes, packaged radioactive materials, and bulk roll-off containers of mixed hazardous waste)	

Region 5 Superfund EJ Analysis

Texas Township Drum Site Kalamazoo, MI



Texas Twp. Drum Site
Kalamazoo County, MI
Two mile radius:
Population 1,881
Minority 4%
Low Income 10%

State of Michigan averages:

Minority: 21%

Low Income: 29%

U.S. EPA Region 5

Environmental Justice Case Criteria
for State of Michigan

Minority: 42% or greater

Low Income: 58% or greater